

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of Levy et al

Art Unit: 3622

Application No.: 10/028,751

Confirmation No.: 2711

Filed: December 21, 2001

For: WATERMARK AND FINGERPRINT  
SYSTEMS FOR MEDIA (as amended)

Examiner: Brown, Alvin L

VIA ELECTRONIC FILING

Date: December 8, 2009

**REPLY BRIEF**

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Sir:

This Reply Brief is responsive to the Examiner's Answer mailed October 27,  
2009.

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## **I. GROUNDS OF REJECTION**

The Grounds of Rejection stated in the Examiner's Answer (pp. 2-7) are the same grounds as stated in the Final Rejection.

Since those matters are addressed in the Appeal Brief, they are not addressed again here.

## **II. RESPONSE TO ARGUMENT – Claim 5 is not rejected under § 103**

On page 7, the Examiner's Answer contends "*the prior art renders obvious the features of the Appellant's representative independent claim 5.*"

Claim 5 was rejected on anticipation grounds; not obviousness. Accordingly, obviousness assertions relating to claim 5 are misplaced.

## **III. RESPONSE TO ARGUMENT – Claims 5, 7, 9 (“...fingerprinted or digitally watermarked...”)**

The Examiner's Answer contends that Abecassis has a watermark or fingerprint, stating, e.g., “*Examiner interprets watermark or fingerprint to be equivalent to an identifier or a code assigned to content.*”<sup>1</sup>

While the Examiner should employ the broadest reasonable meaning of claim terms, the just-cited interpretation is unreasonably broad.

The meaning of the term “fingerprint” was discussed in the Appeal Brief at pages 8-9. From the patent disclosure cited in that discussion, an artisan would understand that a fingerprint is a statistically unique identifier of a signal, derived from the signal itself.

Abecassis does not teach a fingerprint.

Nor does Abecassis teach a digital watermark.

Appellant's specification begins, on page 1, with a discussion of "digital watermarking," and explains that it is a process for hiding data in other objects, e.g., by making slight variations to video sample values:

#### Background of the Invention

Digital watermarking is the science of encoding physical and electronic objects with plural-bit digital data, in such a manner that the data is essentially hidden from human perception, yet can be recovered by computer analysis. ... In electronic objects (e.g., digital audio or imagery – including video), the data may be encoded as slight variations in sample values. Or, if the object is represented in a so-called orthogonal domain (also termed "non-perceptual," e.g., MPEG, DCT, wavelet, etc.), the data may be encoded as slight variations in quantization values or levels. The present assignee's patent 6,122,403, and application 09/503,881, are illustrative of certain watermarking technologies.

Just-mentioned application 09/503,881 (now patent 6,614,914) was incorporated by reference into the present specification (page 19, lines 6-8). It similarly explains that digital watermarking is a process for embedding a machine-readable code into media content by imperceptibly altering data samples of the media content (col. 1):

#### BACKGROUND AND SUMMARY

Digital watermarking is a process for modifying media  
content to embed a machine-readable code into the data  
content. The data may be modified such that the embedded  
code is imperceptible or nearly imperceptible to the user, yet  
may be detected through an automated detection process.  
Most commonly, digital watermarking is applied to media  
such as images, audio signals, and video signals. However,  
it may also be applied to other types of data, including  
documents (e.g., through line, word or character shifting),  
software, multi-dimensional graphics models, and surface  
textures of objects.

Digital watermarking systems have two primary compo-  
nents: an embedding component that embeds the watermark  
in the media content, and a reading component that detects  
and reads the embedded watermark. The embedding compo-  
nent embeds a watermark pattern by altering data samples  
of the media content. The reading component analyzes  
content to detect whether a watermark pattern is present. In  
applications where the watermark encodes information, the  
reader extracts this information from the detected water-  
mark.

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<sup>1</sup> Page 8, middle of page.

Thus, both digital watermarks and fingerprints are *derived from the video content itself* (e.g., from the pixels or DCT coefficients that represent the visual imagery); no additional data conveyance – apart from the video information – is required.

Abecassis’ “category codes” do not do this. Rather, they are data that are separately stored in a table or other data structure (see, e.g., Fig. 1A at #111).

Moreover, even if the claimed fingerprint or watermark is mapped to Abecassis’ “category codes,” claim 5 still would not be anticipated. This is because claim 5 concerns determining whether a promotional message in video is rendered (or skipped), by reference to the sensing (or failed sensing) of the “fingerprinted or digitally watermarked promotional message therein.”

Abecassis does not determine whether a promotional message is rendered (or skipped) by reference to sensing (or failed sensing) of a category code in a promotional message when it is rendered.

Thus, rejections premised on Abecassis teaching fingerprinted or digitally watermarked content should be reversed (i.e., claims 5, 7, 9 and claims dependent thereon).

#### **IV. RESPONSE TO ARGUMENT – “Fingerprint *or* watermark”**

The Examiner’s Answer asserts (page 11) that Appellants have equated fingerprinting and watermarking, by joining them with an ‘or’ in the claim. (Reference was made to claim 1, but it has been canceled; the ‘or’ is found in claim 5.)

Joining nouns by ‘or’ is not an admission that they are equivalent (“Your money *or* your life...”).

## V. RESPONSE TO ARGUMENT – Claim 10

The Examiner's Answer identifies a new excerpt from Abecassis (col. 46, ll. 16-28) that *does* teach an aspect that Appellants earlier believed was missing, i.e., “*receiving a signal from a user interaction device indicating selection of the promotional content during the rendering of said video entertainment content.*”

Nonetheless, claim 10 is still not anticipated; other limitations of the claim are still not met. Claim 10 further requires “*in response to said selection, providing to said user additional promotional information related to the selected promotional content.*”

Thus, for example, if a Coke can is included in a scene of the program Seinfeld, and a user clicks on the can, additional promotional information related to Coke is provided.

Abecassis does not do anything like this.

Also missing, Appellants contend, is the limitation “*the video entertainment content including promotional content integrated therein, rather than interrupting same.*”

The Examiner asserts this limitation is taught by Abecassis, stating

Abecassis discloses a video may be content with advertisement may be transmitted “as a logical seamless and continuous video.”

(Examiner's Answer, page 12).

However, the quoted language from Abecassis (which is found at col. 3, lines 5-6) does not relate to advertising in video programming. Rather, it concerns the seamless omission of programming excerpts (e.g., violence) that the user has specified be omitted.

**VI. OTHER CLAIMS**

Appellants' Appeal Brief is believed to have addressed the other points detailed in the *Response to Arguments* section of the Examiner's Answer, so that discussion is not repeated here.

The Examiner's Answer does not seem to have addressed Appellant's arguments concerning the allowability of claims 6, 12, 23 or 25.

**VII. CONCLUSION**

The Board is requested to issue Findings of Fact consistent with the points presented by Appellants, and reverse the final rejections of the claims.

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Respectfully submitted,

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